

## **Product Evaluation**

GDR117| 0717

**Engineering Services Program** 

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

**Evaluation ID:** GDR-117 **Effective Date:** July 1, 2017

**Re-evaluation Date:** July 2021

Product Name: Models 'FF' and 'IF' DuraCoil Steel Roll-up Doors, Non-Impact Resistant

**Manufacturer:** Raynor Garage Doors

1101 East River Road

P.O. Box 448 Dixon, IL 61021 888-472-9667

## **General Description:**

Raynor DuraCoil Models 'FF' and 'IF' rolling doors are constructed of interlocking slats roll-formed from commercial quality ho-dipped galvanized (G90) steel. Model 'FF' (flat) slats are 22-gauge, 20-gauge, or 18-gauge steel. Model 'IF' (insulated) flat slats are 24-gauge, 22-gauge, 20-gauge, or 18-gauge steel filled with 3/4" thick polyiso board and include a 24-gauge back cover. The guides are primed steel with specifications detailed on the drawings. Slat type, slat gauge, design pressure, maximum door width, and maximum door height are specified in Table 1 and in Table 2.

**Limitations:** 

Maximum Opening Width: 40'-0"

Maximum Opening Height: 21'-0"

**Glazing:** Not permitted.

**Allowable Design Pressure Rating:** Refer to Table 1 and Table 2.

**Product Identification**: The rolling door assemblies have a label applied during door manufacture that includes the manufacturer name and the serial number for the door. The will also have a second label, applied by the installer that includes the manufacturer's name, the door model, and the design pressure rating for the door.

**Impact Resistance:** The rolling steel doors have not been tested for windborne debris resistance. These models must not be installed in the Seaward Zone, unless they are protected with an impact protection system.

**Acceptance of Smaller Assemblies:** Door assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

## Installation:

**General:** Install these doors in accordance with the manufacturer's published installation instructions, the approved drawings, and this product evaluation report. A copy of the approved drawings and the manufacturer's installation instructions must be available at all times at the job site during installation. The information within this evaluation report governs if there are any conflicts between the manufacturer's instructions and this evaluation report. Refer to Table 1 and Table 2 for slat type, slat gauge, design pressure, maximum door width, and maximum door height.

**Design Drawings:** The rolling doors must be installed in accordance with the following drawing:

"Specifications, Windload Doors for Texas Approvals," Drawing No. 2262, Rev. A, Sheets 1 thru 12 of 12, dated July 21, 2016, signed, sealed, and dated May 3, 2017, by Richard A. Baumann, P.E. The stated drawings will be referred to as approved drawings in this report. A copy of the approved drawings must be available at the job site.

**Wall Construction:** The rolling doors may be mounted to the following types of wall framing:

- Cast-in-place concrete (minimum 3,000 psi)
- Steel, minimum 3/16" thick A36 steel

**Anchorage:** The rolling doors must be anchored to the structure in accordance with the approved drawings. Anchorage of the rolling doors to concrete and steel must follow the mounting details on the approved drawings and the fasteners specified in the mounting details. Minimum edge distances and minimum embedment depths for all fasteners that penetrate into the structure must be as specified on the design drawings and the manufacture's installation instructions. Steel bolts must be either hot-dip galvanized or stainless steel (AISI Type 3 or Type 316).

**Note:** Keep the manufacturer's installation instructions and the approved design drawings available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.

Table 1 – Flat Slats

Slat Type	Slat Gauge	Design Pressure (psf)	Maximum Width (ft)	Maximum Height
FF	18	+60 / -60	16	21'-0"
		+55 / -55	20	
		+50 / -50	22	
		+45 / -45	23	
		+40 / -40	25	
		+35 / -35	28	
		+30 / -30	31	
		+25 / -25	35	
		+20 / -20	40	
FF	20	+60 / -60	18	21'-0"
		+55 / -55	20	
		+50 / -50	21	
		+45 / -45	23	
		+40 / -40	25	
		+35 / -35	27	
		+30 / -30	30	
		+25 / -25	30	
		+20 / -20	30	
FF	22	+50 / -50	16	21'-0"
		+45 / -45	20	
		+40 / -40	22	
		+35 / -35	22	
		+30 / -30	22	
		+25 / -25	22	
		+20 / -20	22	

Table 2 – Insulated Flat Slats

Slat Type	Slat Gauge	Design Pressure (psf)	Maximum Width (ft)	Maximum Height
IF		+60 / -60	16	21'-0"
	18	+55 / -55	20	
		+50 / -50	24	
		+45 / -45	25	
		+40 / -40	27	
		+35 / -35	30	
		+30 / -30	33	
		+25 / -25	35	
		+20 / -20	40	
IF	20	+60 / -60	16	21'-0"
		+55 / -55	20	
		+50 / -50	23	
		+45 / -45	24	
		+40 / -40	26	
		+35 / -35	28	
		+30 / -30	31	
		+25 / -25	34	
		+20 / -20	32	
IF	22	+60 / -60	16	21'-0"
		+55 / -55	20	
		+50 / -50	21	
		+45 / -45	22	
		+40 / -40	23	
		+35 / -35	24	
		+30 / -30	24	
		+25 / -25	24	
		+20 / -20	24	
IF	24	+60 / -60	16	21'-0"
		+55 / -55	16	
		+50 / -50	16	
		+45 / -45	20	
		+40 / -40	20	
		+35 / -35	20	
		+30 / -30	20	
		+25 / -25	20	
		+20 / -20	20	